

IN THE SPECIFICATION:

Please substitute paragraphs 19, 20, 22, 26, 39, 56, 66 and 72 with the following replacement paragraphs:

[0019] In accordance with a preferred embodiment, the system 100 includes a first database 107 that may include identification, demographic, restriction, preference, shipping data, identity verification, authentication data and/or any other information relating to the consumer 110. In addition, a second database 108 includes payment information, (e.g., financial account information, loyalty information, etc) describing how the consumer 110 may wish to pay for transactions in accordance with the acceptance of one or more offer. The two databases 107, 108 can, of course, be combined as a single database or multiple databases including all of the above information. The databases, as used herein, may be incorporated into a smart card and/or the databases may also include external databases wherein similar or additional information may be acquired. Moreover, the databases discussed herein may be any type of database, such as relational, hierarchical, object-oriented, and/or the like. Common database products that may be used to implement the databases include DB2® by IBM (White Plains, N.Y.), any of the database products available from ~~Oracle Corporation~~ ORACLE CORPORATION (Redwood Shores, Calif.), MICROSOFT ACCESS or MSSQL by ~~Microsoft Corporation~~ MICROSOFT CORPORATION (Redmond, Wash.), or any other database product. The database may be organized in any suitable manner, including as data tables or lookup tables. Association of certain data may be accomplished through any data association technique known and practiced in the art. For example, the association may be

accomplished either manually or automatically. Automatic association techniques may include, for example, a database search, a database merge, GREP, AGREP, SQL, and/or the like. The association step may be accomplished by a database merge function, for example, using a "key field" in each of the manufacturer and retailer data tables. A "key field" partitions the database according to the high-level class of objects defined by the key field. For example, a certain class may be designated as a key field in both the first data table and the second data table, and the two data tables may then be merged on the basis of the class data in the key field. In this embodiment, the data corresponding to the key field in each of the merged data tables is preferably the same. However, data tables having similar, though not identical, data in the key fields may also be merged by using AGREP, for example.

**[0020]** Each consumer may be equipped with a computing system to facilitate communication, including presentations of advertisements, offers, and the like, between a merchant 130, an interface device 120, and a consumer 110. The consumer 110 may have a computing unit in the form of a personal computer, although other types of computing units may be used including laptops, notebooks, hand held computers, set-top boxes, and the like. The display 101 that is coupled to the computing unit may be configured to present television programming or web broadcasts 160, which may be received from a recording/playback device such as a digital video recorder (DVR), personal video recorder (PVR), VCR, DVD or any other similar device for transmitting signals and/or may be received through a broadcast transmission such as cable transmission, satellite

transmission, UHF transmission, VHF transmission, WiFi WI-FI and the like. The point of sale office has a computing unit implemented in the form of a computer-server, although other implementations are possible. The merchant 130 may have a computing center in the form of a main frame computer. However, the merchant 130 may be implemented in other forms, such as a mini-computer, a PC server, a network set of computers, and the like.

[0022] Communication between the parties to the advertisement, offer, and acceptance transaction and the system 100 may be accomplished through any suitable communication means, such as, for example, a telephone network, Intranet, Internet, point of interaction device (point of sale device, personal digital assistant, cellular phone, kiosk, etc.), infrared remote control, hard-wired remote control, UHF remote control, online communications, off-line communications, wireless communications, WiFi WI-FI, digital video recorder (DVR), personal video recorder (PVR) and/or the like. One skilled in the art will also appreciate that, for security reasons, any databases, systems, or components of the present invention may consist of any combination of databases or components at a single location or at multiple locations, wherein each database or system includes any of various suitable security features (e.g., authenticating, embedded certificates, consumer ID/password, transmitted identifier, etc. as further described below), such as firewalls, access codes, encryption, de-encryption, compression, decompression, and/or the like.

[0026] The computers discussed herein may provide a suitable website or other Internet-based graphical consumer interface which is accessible by consumers. In one embodiment, ~~the Internet Information Server~~ MICROSOFT INTERNET INFORMATION SERVER, MICROSOFT Transaction Server TRANSACTION SERVER, and MICROSOFT SQL Server SERVER, are used in conjunction with the MICROSOFT operating system, MICROSOFT NT web server software, a MICROSOFT SQL database system, and a MICROSOFT Commerce Server COMMERCE SERVER. Additionally, components such as ACCESS or SQL SERVER, ORACLE, SYBASE, INFORMIX MYSQL, INTERBASE, etc., may be used to provide an ADO-compliant database management system. The term "webpage" as it is used herein is not meant to limit the type of documents and applications that might be used to interact with the consumer. For example, a typical website might include, in addition to standard HTML documents, various forms, JAVA applets, JAVASCRIPT, active server pages (ASP), common gateway interface scripts (CGI), extensible markup language (XML), dynamic HTML, cascading style sheets (CSS), helper applications, plug-ins, and the like.

[0039] Once the consumer has viewed, analyzed and/or perceived the offer or advertisement, if the consumer wishes to accept the offer, the consumer may perform the specified act of acceptance (step 236) which may include, for example, selecting a simulated button on display 101, pressing a button or series of buttons on a remote control 125, placing a telephone call 126, speaking into a microphone 127, using a pager

128, using wireless device (e.g., ~~WiFi~~ WI-FI) or performing any other action or non-action which conveys the consumer's desire to accept the offer. Moreover, the consumer may be provided with phone number dialing hardware and/or software which may be coupled to the interface device 120, thereby allowing the consumer initiate the automatic dialing of a desired phone number that is displayed in the advertisement and thereby facilitate communication with the interface device 120. The acceptance may also be accomplished (e.g., subsequent to the time of its broadcast) through a digital video recorder (DVR), personal video recorder (PVR) or similar device. The acceptance device may also include software and/or hardware configured to transmit or provide, for example, a remote control ID, RFID, machine IP address, web services (e.g., managing consumer identities as discussed above), etc. The consumer action may include a predefined action or non-action which indicates acceptance of the offer when the results of the act (e.g., transmitted signal) are received by the system (step 240). The acceptance may also include a security process (step 238) which may involve additional steps, or additional hardware and/or software.

**[0056]** The interface device 120 may then transmit the amended acceptance 132 (e.g., including loyalty point value) to the merchant 130 (step 250). Prior to transmitting the amended acceptance 132 to the merchant, the system and method may also include authenticating or authorizing the transaction. One skilled in the art will appreciate that the authentication or authorization steps discussed herein may be implemented during any suitable portion of the method discussed herein. In an exemplary embodiment of the

invention, a consumer is provided with a smart card having a standardized protocol to make credit and debit transactions, such as, for example, the BLUE from AMERICAN EXPRESS smart card or the Europay EUROPAY MASTERCARD VISA (EMV) smart card. The consumer utilizes the EMV Smartcard to interface with a wallet server to authenticate the consumer with a merchant server on a network through communications with a security server provided by a financial institution or credit provider such as, for example, AMERICAN EXPRESS. The consumer conducts a virtual purchase transaction using interface device 120 but via the internet through a wallet server interacting with the security server to provide enhanced reliability and confidence in the transaction.

[0066] While the network primarily discussed herein relates to an interactive television (ITV) network, it will be appreciated that many applications of the present invention could be formulated. One skilled in the art will appreciate that the network may include any system for exchanging data or transacting business, such as web broadcasts, the Internet, an intranet, an extranet, WAN, LAN, satellite communications, and/or the like. The consumers may interact with the system via any input device such as a keyboard, mouse, kiosk, personal digital assistant, handheld computer (e.g., PALM PILOT), cellular phone, integrated circuit card and/or the like. Similarly, the invention could be used in conjunction with any type of personal computer, network computer, workstation, minicomputer, mainframe, or the like running any operating system such as any version of WINDOWS, WINDOWS NT, WINDOWS\_2000, WINDOWS 98, WINDOWS 95, MAC OS, OS/2, BEOS, LINUX, UNIX, SOLARIS or the like. Moreover, although the

invention is frequently described herein as being implemented with TCP/IP communications protocols, it will be readily understood that the invention could also be implemented using IPX, APPLETALK, IP-6, ~~NetBIOS~~ NETBIOS, OSI or any number of existing or future protocols. Moreover, the system contemplates the use, sale or distribution of any goods, services or information over any network having similar functionality described herein.

[0072] Further, it should be noted that the present invention may employ any number of conventional techniques for data transmission, signaling, data processing, network control, and the like. Still further, the invention could be used to detect or prevent security issues with a consumer-side scripting language, such as JAVASCRIPT, ~~VBScript~~ VBSCRIPT or the like. For a basic introduction of cryptography and network security, the following may be helpful references: (1) "Applied Cryptography: Protocols, Algorithms, And Source Code In C," by Bruce Schneier, published by John Wiley & Sons (second edition, 1996); (2) "Java Cryptography" by Jonathan Knudson, published by O'Reilly & Associates (1998); (3) "Cryptography & Network Security: Principles & Practice" by William Stalling, published by Prentice Hall; all of which are hereby incorporated by reference.